EDITORIAL ARTICLES.

KLEMM ON THE TREATMENT OF FRACTURES INVOLVING JOINTS.[1]

IN the therapy of fractures involving the joints there is unanimity of opinion upon one point—that by a continuous immobilization a cure is very problematical. If the patient is to regain good functional use of the joint there must be a proper balance in the treatment between rest and motion; rest of the broken bone; motion of the joint, muscles, tendons and fascia—how these conditions are to be obtained is the subject of much controversy.

In all joint fractures, as well as in most par-articular fractures, there occurs an extravasation of blood into the joint cavity and into the surrounding parts. The pathological changes which subsequently result are dependent upon the hæmatomata.

To these changes belong

(1) Difficulty in placing and retaining the fragments in good apposition.

(2) Changes in the joint cavity:
  - (*a*) Thickening and toughening of the synovia.
  - (*b*) A growing together of the intra-articular parts of the joint surfaces by means of newly-formed connective tissue (ankylosis).

(3) An increase in density and cicatricial changes in the par-articular tissues.

(4) Obliteration of the tendons in their sheaths.

(5) Nutritive changes in the muscles.

(6) Pressure and disintegration of the nerve trunks, and, as a consequence, a possible neuritis with resulting disturbance of nutrition of bones and joint which result in deformities.

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[1] Paul Klemm (Riga), Sammlung klinischer Vorträge, No. 78, September, 1893.

(7) Hydrops of the joints as well as a firm œdema in the par-articular tissue.

We can thus see how the presence of intra- and par-articular hæmatomata may affect the prognosis; and it is clear that these extravasations should be removed as soon as possible. What means have we at our command to accomplish this result, and how shall we use them?

The therapeutic measures for the removal of such masses may be divided into two classes: The bloody and the non-bloody. To the first of these belong

(1) Puncture of the blood tumor and its removal, with or without subsequent irrigation.

(2) Incision into the mass and its removal; with this may be classified also the suture of the bony fragments.

Under the non-bloody modes of treatment are

(1) Compression.

(2) Massage.

The first method would appear to be of chief value in those cases only where there is such large extravasation of blood that gangrene of the distended soft parts is to be feared. Just as incisions are made into infiltrated tissues so that the relief of existing pressure will prevent subsequent occurrence of necrosis.

The method of incision with subsequent suturing of bony fragments is to be reserved for cases where there is already an injury to the soft parts, or where the injury is so extensive that a reposition and coaptation of the fragments of bone is impossible without suturing. At any rate, it seems unjustifiable to suture the bone at the outset in a simple fracture before it has been determined that any other mode of treatment will give bad results.

Massage and compression are the factors which, when combined with active and passive motion, play the most important rôle in the treatment of joint fractures. Massage fulfills both indications for a rapid absorption and prevention of atrophy. Degeneration and new growths are also restricted by massage. Compression acts more in a passive way. Massage increases the circulation in the affected region, new tissue formation is favored, and the veins and lymphatics are rendered more patent, so that the extravasated fluid is pressed by the manipulations directly into these and so carried away. Compression aids these results by increasing the *vis a tergo* in the time between the use of massage and so serves to increase absorption.

Hand in hand with these manipulations active and passive motion should be used, which should vary in extent from time to time and thus, by changing the points of contact, prevent degenerative changes in these parts.

As frequently happens in the use of a new method, some have gone to the other extreme and recommended an entire absence of splints and immobilization and entire reliance upon massage and motion. This is certainly wrong. The broken bone needs rest and this indication must be met by the use of splints and bandages, and a proper position. Of course, cases vary greatly, and good judgment must be used to give to each form of treatment its proper relative value.

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SOKOLOFF ON FIBROMA ARBORESCENS OF THE JOINTS.[1]

RECENT opportunities for operative investigation have shown that papillomatous growths are a very common complication of chronic rheumatism. Formerly these extensive growths were thought to be extremely rare, and Schmolck, in writing upon the subject, could report but two cases occurring in von Volkmann's clinic. Since Schmolck's article appeared a few scattered cases have been reported, most of them being tubercular in character. Riedel even maintains that such papillomatous growths are the result of the slight irritation from old tubercular deposits. M. Schueller considers the papillomata to be the result of a chronic inflammatory irritation, and calls attention to the fact that they are present in various pathologi-

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[1] N. A. Sokoloff, St. Petersburg: Sammlung klinische Vorträge, No. 81, September, 1893.